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PLOWED MATERIAL CATCHER FOR V-BLADE SNOWPLOW

REFERENCE TO RELATED APPLICATION

This invention is the subject of provisional application Serial No. 60/087,070 filed May 28, 1998 and entitled SNOW CATCHER.

BACKGROUND AND BRIEF DESCRIPTION OF THE INVENTION

The present invention provides a plowed material catcher attachment system for an adjustable V-bladed snowplow or other V-bladed plow.

The prior art uses flat rubber belting bolted to the cutting edges of the blades to prevent a small track of plowed material from passing the blades.

The object of the invention is to provide an adjustable V-bladed plow with a device to prevent the small trail of material which passes through the small opening between two blades in any blade position.

A plowed material (e.g. snow) catcher member is fixedly mounted below the center or vertical pivot assembly for the adjustable blades. It includes an arcuate ramp portion projecting forwardly of the central pivot assembly and directs plowed material to the blades, respectively.

Reference is made to Capra et al, U.S. Patent No. 5,568,694 (incorporated herein by reference) for a full exposition of the plow and its functioning operation.

DESCRIPTION OF THE DRAWINGS

The above and other objects, advantage and features of the invention will become more clear when considered with the following specification and accompanying drawings wherein;

Figure 1 is an exploded view of a snow plow system incorporating the invention,

Figure 2 is an enlarged isometric view of the snow catcher of this invention,

Figure 3 is an enlarged view of the snow catcher *per se*, and

Figure 4 is a sectional view of the snow catcher.

DETAILED DESCRIPTION OF THE INVENTION

Referring to Figure 1, the following list sets out the component part number and description of the component part:

Component Part	Description
1	Blade Half Right
2	Blade Half Left
3	Center Section, RT3 V-Blade (all models)
4	T-Frame, RT3 V-Blade (all models)
5	Cutting Edge, 7'6" V-Blade 5/8" Holes
5	Cutting Edge, 8'2" V-Blade 5/8" Holes
5	Cutting Edge, 9'2" V-Blade 5/8" Holes
6	Carriage Bolt Set
	Includes: (10) Carriage Bolts 5/8"-11 x 2" Grade #5 ZN
	(10) 5/8" Hardened Washers
	(10) 5/8" Lock Nuts
7	Bumper Stop, w/Mounting Hardware
7	A Self-Tapping Bolt, 3/8" - 16 x 2" Hex Washer Head ZN
9	Spring Yoke, RT3 V-Blade
10-44-45	Plow Shoe Assembly
	Includes: (1) Plow Shoe (1" Shaft)
	(1) 7/16" Quick Pin
	(20) 1" Flat Washers

	10-44-45	Plow Shoe, Cast Iron (Center Shoe)
		Includes: (1) Plow Shoe (1" Shaft), Cast Iron
		(1) 7/16" Quick Pin
		(20) 1" Flat Washers
5	11	Snow Catcher w/Mounting Hardware
	12	Horizontal Hinge Pin Kit, RT3 V-Blade (all models)
	13	Center Hinge Pin, RT3 V-Blade (all models)
	14	Hydraulic Pump - Power Unit Barnes
	14 A	Hydraulic Pump Filler Cap
10	14 B	Hydraulic Pump Motor - Barnes
	14 C	Hydraulic Pump Solenoid
	14 D	Hydraulic Pump Solenoid Ground Cable
	14 E	Battery cable, 66"
	14 H	Ground/Power Cable 60" (Vehicle Side)
15	14 J	Ground/Power Cable 36" (Plow Side)
	14 K	Ground/Power Cable Dust Cap/Plug
	14 L	Hydraulic Reservoir Drain plug
	15	Hydraulic Valve Assembly with SmartHitch
	15 A	Hydraulic Lift/Angle Valve
20	15 B	Hydraulic Valve Coil
	15 C	Hydraulic Relief Valve
	15 D	Hydraulic Check Valve
	15 E	Hydraulic Valve Screen Cartridge
	15 F	Hydraulic Valve Ground Strap
25	15 G	Hydraulic Valve, SmartHitch Attach
	15 H	Hydraulic Valve, Flow Control Cartridge
	16	SmartHitch Toggle Switch Kit (Includes Switch and Jumpers)
	17	Hydraulic Cylinder, Angle
	18 A	Hydraulic Hose 1/4" x 12", 1/4" MNPT x 1/4" MNPT
	18 B	Hydraulic Hose 1/4" x 15-1/2", (1/4" MNPT x 1/4" MNPT)
	18 C	Hydraulic Hose 1/4" x 15" (1/4" ORB x 1/4" MNPT)
	22	Hydraulic Hose 3/8" x 40" (1/4" MNPT x 3/8" MNPT)
	25	Hydraulic Cylinder, RT3 Lift
	32	Hydraulic Swivel Fitting, 90 Deg. (1/4" ORS x 1/4" FPS)
	33	Trip/Return Spring
	37	Blade Guide Set
	37 A	Blade Guide Tip
	38	Auxiliary Headlight Set, Low Profile Plastic
	38 A	Turn Signal Cover, Low Profile Plastic
40	38 L	Auxiliary Headlight, Left, Low Profile Plastic
	38 R	Auxiliary Headlight, Right, Low Profile Plastic
	39	Auxiliary Light Harness Assembly
		Includes: Toggle Switch Connectors
	39 A	Light and Control Harness 116" (Vehicle Side)
45	39 B	Light and Control Harness 48" (Plow Side)
	40 A	Switch Box Control, V-Blade
	40 B	Joystick Control, V-Blade
	41	Rocker Switch - Lift
	42	Rocker Switch - Angle
50	44	Quick Pin - 7/16"
	46	Hydraulic Fitting, 90 Deg. (1/8" MNPT x 1/4" FNPT)
	47	Eye Bolt, 1/2"
	55	Hex Head Cap Screw, 5/8" - 11 x 4-1/2" GR5 ZN
	60	Pivot Pin, Kit (Includes Cotter Pins and Washers)
55	60 A	Pivot Pin
	60 B	3/16" Cotter Pin

has a flat upper surface 11F and mounting hole 11MH.
Raised portion 11P includes a key hole 11K for receiving
a key pin (not shown) which prevents rotation of catcher
11.

5 In operation, any plowed or unplowed material which
would tend to trail between the blades is blocked and
directed to the plowed material catcher 11 to one blade
or the other so as to not leave a trail of plowed
material between the plow blades 1 and 2.

10 While the invention has been described in relation to
preferred embodiments of the invention, it will be
appreciated that other embodiments, adaptations and
modifications of the invention will be apparent to those
skilled in the art.